## NPDES Permit No. IL0003930 Notice No. 12121401.bwc

Public Notice Beginning Date: August 12, 2015

Public Notice Ending Date: September 11, 2015

National Pollutant Discharge Elimination System (NPDES)
Permit Program

Draft Reissued NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois Environmental Protection Agency Bureau of Water Division of Water Pollution Control Permit Section 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276 217/782-0610

Name and Address of Permittee:

Name and Address of Facility:

Rentech Nitrogen, LLC 16675 Highway 20 West East Dubuque, Illinois 61025 Rentech Nitrogen GP, LLC 16675 Highway 20 West East Dubuque, Illinois 61025 (Jo Daviess County)

The Illinois Environmental Protection Agency (IEPA) has made a tentative determination to issue a NPDES permit to discharge into the waters of the state and has prepared a draft permit and associated fact sheet for the above named Permittee. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet. The last day comments will be received will be on the Public Notice period ending date unless a commentor demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. Interested persons are invited to submit written comments on the draft permit to the IEPA at the above address. Commentors shall provide his or her name and address and the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to those issues. Commentors may include a request for public hearing. Persons submitting comments and/or requests for public hearing shall also send a copy of such comments or requests to the permit applicant. The NPDES permit and notice number(s) must appear on each comment page.

The application, engineer's review notes including load limit calculations, Public Notice/Fact Sheet, draft permit, comments received, and other documents are available for inspection and may be copied at the IEPA between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the draft permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 45 days before any public hearing. Response to comments will be provided when the final permit is issued. For further information, please call Brian W. Cox at 217/782-0610.

The applicant is engaged in the manufacture of nitrogenous fertilizers including anhydrous ammonia, nitric acid, ammonium nitrate solution, urea solution, solid granular urea, and liquid carbon dioxide (SIC 2873). Waste water is generated from the water purification processes, the operation of compressor(s), condenser(s), and boiler(s) used in the production processes, from the operation of cooling towers, and from storm water runoff. Plant operation results in an average discharge of 0.49 MGD of cold lime softener blowdown, cooling tower blowdown, pressure filter backwash, sodium zeolite softener blowdown, boiler blowdown, ammonia plant compressor blowdown, urea plant compressor blowdown, and ammonia plant process condensate and an intermittent discharge of storm water runoff and well rehabilitation wastewater from Outfall 001 and during emergency overflows from Outfall 008.

The following modifications are proposed:

A change in corporate structure occurred on November 9, 2011. Rentech Energy Midwest Corporation converted from a Delaware corporation to a Delaware limited liability company and changed its name to Rentech Nitrogen, LLC. The employees of Rentech Energy Midwest Corporation were transferred to Rentech Nitrogen GP, LLC which became a Co-Operator of the facility.

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The former mailing address of P.O. Box 229, East Dubuque, Illinois 61025 will no longer be used. The new mailing address is the same as the facility's address, 16675 Highway 20 West, East Dubuque, IL.

Outfalls 002, 003, 004, 005, 006, and 007 have been removed from the permit. Outfalls 002, 003, and 004 previously received an average discharge of 0.36 MGD of well rehabilitation water from process water wells located on a Corps of Engineers easement. Outfalls 005, 006, and 007 were also previously permitted for the discharge of 0.36 MGD of well rehabilitation water. These outfalls are no longer necessary and have also been removed from the permit.

The facility has installed new process water wells and modified their process water purification system to provide better quality water to the plant in order to reduce impurities in their products. These changes have resulted in increases to pressure filter blowdown, lime sludge blowdown, and cooling tower blowdown and have resulted in a decrease in boiler blowdown.

Outfall 008 has been added to the permit for the purposes of monitoring the emergency overflow discharge from the second cell of the lime sludge settling pond. Given the nature of the discharge (short-term, temporary) and that the outfall is required as an emergency bypass to prevent property damage and ensure efficient operation, the proposed activity is hereby subject to Subsection (d) of Ill. Adm. Code 302.105 and is not subject to further antidegradation assessment.

The Agency has reviewed the mixing study performed by Huff & Huff, Inc dated May 2015. The results of the study were that the dimensions of the ZID were 15' wide by 15' long and had a dilution factor of 36:1 and the dimensions of the mixing zone were 50' wide by 100' long and had a dilution factor of 217:1. Therefore, based on this analysis, no water quality based effluent limits are necessary at Outfall 001 for ammonia or zinc. In order to prevent backsliding the existing limits for ammonia and zinc have been retained in the permit.

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Application is made for the existing discharge(s) which are located in Jo Daviess County, Illinois. The following information identifies the discharge point, receiving stream and stream classifications:

<u>Outfall</u>	Receiving Stream	<u>Latitude</u>	<u>Longitude</u>	Stream Classification	Integrity Rating
001	Mississippi River	42° 23′ 52" North	90° 33′ 43″ West	General Use	Not Rated
	Unnamed Tributary to				
800	Little Menominee River	42° 26' 22" North	90° 33′ 05" West	General Use	Not Rated

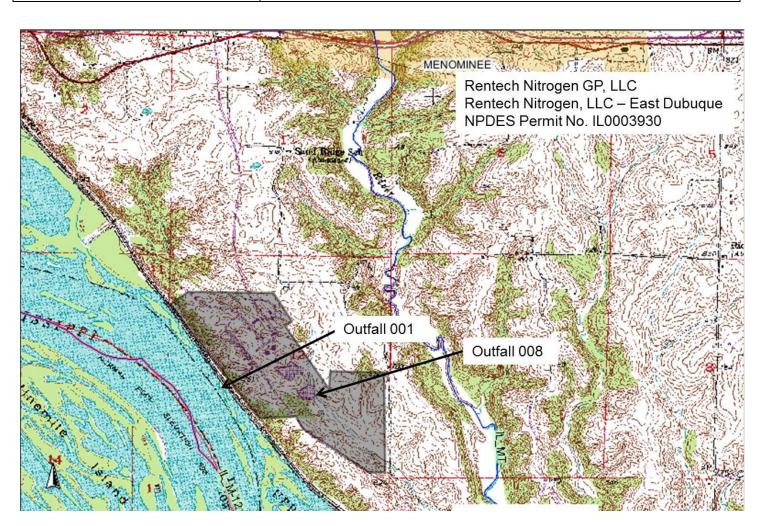
To assist you further in identifying the location of the discharge please see the attached map.

The stream segment receiving the discharge from outfall(s) 008 is not on the 2014 303(d) list of impaired waters and is not a biologically significant stream on the 2008 Illinois Department of Natural Resources Publication – *Integrating Multiple Taxa in a Biological Stream Rating System*.

The stream segment, IL\_M-12 receiving the discharge from outfall(s) 001, is on the draft 2014 303(d) list of impaired waters, and was not provided a Biological Stream Characterization rating in the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*.

The following parameters have been identified as the pollutants causing impairment:

<u>Pollutants</u>	Impaired Use
Polychlorinated biphenyls and mercury	Fish Consumption Use



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The discharge(s) from the facility shall be monitored and limited at all times as follows:

Outfall: 001

		IITS lbs/day (DMF)*		CONCEN <u>LIMI</u> T		
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Flow (MGD)				Monitor Only	Monitor Only	
рН				Shall be within the 9.0 s.u.	ne range of 6.0 –	35 IAC 304.125
BOD <sub>5</sub>	123 (247)	245 (493)	35 IAC 304.120	30	60	35 IAC 304.120
Total Suspended Solids	123 (247)	245 (493)	35 IAC 304.120	30	60	35 IAC 304.120
Temperature					Monitor Only	
Oil & Grease	56 (123)	113 (246)	35 IAC 301.124	15	30	35 IAC 301.124
Ammonia (as N)		645**	40 CFR 122.44(I)		Monitor Only	
Organic Nitrogen (as N)	904	1742***	40 CFR 418		Monitor Only	
Nitrates (as N)	210	587***	40 CFR 418		Monitor Only	
Zinc	6.0	12	40 CFR 122.44(I)	1.0	2.0	35 IAC 304.124
Total Kjeldahl Nitrogen					Monitor Only	
Total Residual Chlorine					0.05****	40 CFR 125.3

<sup>\*</sup> Load Limits based on design maximum flow are noted in parentheses and shall apply only when the discharge flow exceeds the design average flow.

<sup>\*\*</sup> Compliance with the daily maximum limits for ammonia (as N) shall be determined by adding the daily maximum mass of ammonia (as N) from Outfall 001 and the daily maximum mass of ammonia (as N) from Outfall 008.

<sup>\*\*\*</sup>Compliance with the daily maximum limits for organic nitrogen (as N) shall be determined by adding the daily maximum mass of organic nitrogen (as N) from Outfall 001 and the daily maximum mass of organic nitrogen (as N) from Outfall 008.

<sup>\*\*\*\*</sup>Compliance with the daily maximum limits for nitrates (as N) shall be determined by adding the daily maximum mass of nitrates (as N) from Outfall 001 and the daily maximum mass of nitrates (as N) from Outfall 008.

<sup>\*\*\*\*\*</sup> The water quality standard for TRC (0.011 mg/l for 30-day average and 0.019 mg/l for daily max) is below the method detection level (0.05 mg/l) as described in 40 CFR 136. Therefore, for the purpose of this permit, the method detection level will be utilized to determine compliance with the permit limit for TRC. A measurement of <0.05 mg/l reported on the DMR shall not be considered a violation of the water quality based effluent limit. This reporting threshold is being established to determine compliance and does not authorize the discharge of TRC in excess of the water quality based effluent limit.

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Outfall: 008

		MITS lbs/day - (DMF)		NTRATION IS mg/l		
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Flow (MGD)				Monitor Only	Monitor Only	
рН				9.0 s.u.	he range of 6.0 –	35 IAC 304.125
BOD <sub>5</sub>				30	60	35 IAC 304.120
Total Suspended Solids				30	60	35 IAC 304.120
Temperature						35 IAC 302.211
Oil & Grease				15	30	35 IAC 301.124
Ammonia (as N)						
Spring/Fall**		Monitor*			6.6	35 IAC 302.212 and 35 IAC 355
Summer**		Monitor*			6.3	35 IAC 302.212 and 35 IAC 355
Winter**		Monitor*			5.7	35 IAC 302.212 and 35 IAC 355
Organic Nitrogen (as N)		Monitor*			Monitor Only	
Nitrates (as N)		Monitor*			Monitor Only	
Zinc					0.202	35 IAC 302.208
Total Kjeldahl Nitrogen					Monitor Only	
Total Residual Chlorine					0.05***	40 CFR 125.3

<sup>\*</sup>Compliance for load limits for Ammonia (as N), Organic Nitrogen (as N), and Nitrates (as N) shall be determined at Outfall 001.

<sup>\*\*</sup>For the purpose of this permit, Spring/Fall consists of March-May & September - October, Summer consists of June - August, and Winter consists of November-February

<sup>\*\*\*</sup> The water quality standard for TRC (0.011 mg/l for 30-day average and 0.019 mg/l for daily max) is below the method detection level (0.05 mg/l) as described in 40 CFR 136. Therefore, for the purpose of this permit, the method detection level will be utilized to determine compliance with the permit limit for TRC. A measurement of <0.05 mg/l reported on the DMR shall not be considered a violation of the water quality based effluent limit. This reporting threshold is being established to determine compliance and does not authorize the discharge of TRC in excess of the water quality based effluent limit.

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### Load Limit Calculations:

- A. Load limit calculations for the following pollutant parameters were based on an average and maximum flow of 0.49 MGD and 0.9852 MGD respectively and using the formula of maximum flow (MGD) X concentration limit (mg/l) X 8.34 = the average or maximum load limit (lbs/day): total suspended solids,  $BOD_5$ , and oil & grease.
- B. Production based load limits were calculated by multiplying the average production by the effluent limit contained in 40 CFR 418. Production figures utilized in these calculations for the following subcategories are as follows:

Subcategory	Production Rate
B - Ammonia	1,740,000 lb/day
C - UREA	Solution 840,000 lb/day, Granulated 672,000 lb/day
D - Ammonia Nitrate	1,320,000 lb/day
E - Nitric Acid	972,000 lb/day

Ammonia (as N), Organic Nitrogen (as N) and Nitrates (as N) were limited using Federal production based load limits. The following sample calculation shows the methodology utilized to determine production based load limitations:

BAT<sub>average</sub> = Ammonia[B] + UREA [C] Solution + UREA[C] Granulated + Ammonia Nitrate[D] + Nitric Acid[E] + Shipping Losses + Cooling Tower Blowdown + Precipitation Runoff.

 $BAT_{average}$  Ammonia (as N) = (0.025 \* 1,740) + (0.27 \* 840) + (0.27 \* 672) + (0.04 \* 1,320) + (0.008 \* 972) + 32.18 + 184.67 + 0 = 729.2 lb/day.

The load limits appearing in the permit for Outfall 001 for ammonia (as N) and zinc have been retained from the existing NPDES Permit to prevent backsliding in accordance with 40 CFR 122.44(I).

The load limits appearing in the permit will be the more stringent of the State and Federal Guidelines.

The following explain the conditions of the proposed permit:

The special conditions clarify the following: Flow reporting requirements, pH limits and reporting requirements, temperature limitations, DMR submissions, monitoring location, class K operators, cooling water additives, total residual chlorine limitations, and storm water requirements.

NPDES Permit No. IL0003930

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

## NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date: Issue Date: Effective Date:

Name and Address of Permittee: Facility Name and Address:

Rentech Nitrogen, LLC
16675 Highway 20 West
East Dubuque, Illinois 61025

Rentech Nitrogen GP, LLC
16675 Highway 20 West
East Dubuque, Illinois 61025

(Jo Daviess County)

Discharge Number and Name: Receiving Waters:

001 Lime Slude Settling Pond Mississippi River

008 Emergency Overflow Unnamed Tributary to Little Menominee River

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of Ill. Adm. Code, Subtitle C and/or Subtitle D, Chapter 1, and the Clean Water Act (CWA), the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Alan Keller, P.E. Manager, Permit Section Division of Water Pollution Control

SAK:BWC:12121401.bwc

### NPDES Permit No. IL0003930

## **Effluent Limitations and Monitoring**

1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): 001 Lime Sludge Settling Pond

(DAF = 0.49 MGD; DMF = 0.99 MGD)

This discharge consists of: Approximate Flow: 0.095 MGD Cold Lime Softener Blowdown Cooling Tower Blowdown 0.220 MGD 3. Pressure filter backwash 0.078 MGD 4. Ammonia Plant Compressor Blowdown and Pump Seal Flush 0.029 MGD 5. Sodium Zeolite Softener Regeneration Rinse 0.036 MGD 6. Boiler Blowdown 0.032 MGD Intermittent 7. Storm water runoff Well Rehabilitation Intermittent

	LOAD LIMI DAF (I	•	CONCENTRATION <u>LIMITS mg/L</u>			
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Flow (MGD)			See Specia	al Condition 1	Continuous	Measurement
рН			See Specia	al Condition 2	1/Week	Grab
BOD₅	123 (247)	245 (493)	30	60	1/Week	Composite
Total Suspended Solids	123 (247)	245 (493)	30	60	1/Week	Composite
Temperature			See Special Condition 3		1/Month	Single Reading
Oil & Grease	56 (123)	113 (246)	15	30	1/Month	Grab
Ammonia (as N)		645**		Monitor Only	1/Week	Composite
Organic Nitrogen (as N)	904	1742***		Monitor Only	2/Year	Composite
Nitrates (as N)	210	587***		Monitor Only	2/Year	Composite
Zinc	6.0	12	1.0	2.0	1/Month	Composite
Total Kjeldahl Nitrogen		Monitor Only		Monitor Only	2/Year	Composite
Total Residual Chlorine				0.05****	1/Month	Grab

<sup>\*</sup> Load Limits based on design maximum flow are noted in parentheses and shall apply only when the discharge flow exceeds the design average flow.

<sup>\*\*</sup>See Special Condition 14.

<sup>\*\*\*</sup> See Special Condition 15.

<sup>\*\*\*\*</sup> See Special Condition 16.

<sup>\*\*\*\*\*</sup>See Special Condition 11.

## NPDES Permit No. IL0003930

# **Effluent Limitations and Monitoring**

1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): 008 Emergency Overflow

(DAF = Intermittent)

This discharge consists of:

1. Cold Lime Softener Blowdown

- 2. Cooling Tower Blowdown
- 3. Pressure filter backwash
- 4. Ammonia Plant Compressor Blowdown and Pump Seal Flush
- 5. Sodium Zeolite Softener Regeneration Rinse
- 6. Boiler Blowdown
- 7. Storm water runoff
- 8. Well Rehabilitation

	LOAD LIMITS lbs/day <u>DAF (DMF)</u>		CONCENTRATION LIMITS mg/L			
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Flow (MGD)			See Specia	l Condition 1	Continuous	Measurement
рН			See Specia	l Condition 2	1/Discharge	Grab
BOD <sub>5</sub>			30	60	1/Discharge	Composite
Total Suspended Solids			30	60	1/Discharge	Composite
Temperature			See Specia	l Condition 4	1/Discharge	Single Reading
Oil & Grease			15	30	1/Discharge	Grab
Ammonia (as N)						
Spring/Fall****		Monitor Only*		4.2	1/Discharge	Composite
Summer****		Monitor Only*		2.8	1/Discharge	Composite
Winter***		Monitor Only*		2.6	1/Discharge	Composite
Organic Nitrogen (as N)		Monitor Only**			1/Discharge	Composite
Nitrates (as N)		Monitor Only***			1/Discharge	Composite
Zinc				0.202	1/Discharge	Composite
Total Kjeldahl Nitrogen		Monitor Only		Monitor Only	1/Discharge	Composite
Total Residual Chlorine				0.05****	1/Discharge	Grab

<sup>\*</sup>See Special Condition 14.

<sup>\*\*</sup>See SpecialCondition 15.

<sup>\*\*\*</sup> See SpecialCondition 16.

<sup>\*\*\*\*</sup>For the purpose of this permit, Spring/Fall consists of March-May & September - October, Summer consists of June – August, and Winter consists of November-February

<sup>\*\*\*\*\*</sup>See Special Condition 11.

#### **Special Conditions**

<u>SPECIAL CONDITION 1</u>. Flow shall be measured in units of Million Gallons per Day (MGD) and reported as a monthly average and a daily maximum on the Discharge Monitoring Report.

<u>SPECIAL CONDITION 2</u>. The pH shall be in the range 6.0 to 9.0. The monthly minimum and monthly maximum values shall be reported on the DMR form.

SPECIAL CONDITION 3. This facility meets the allowed mixing criteria for thermal discharges pursuant to 35 IAC 302.102. No reasonable potential exists for the discharge to exceed thermal water quality standards. This determination is based on the maximum flow of 0.99 MGD from Outfall 001 and a maximum temperature of 85.2 degrees Fahrenheit. The permittee shall monitor the flow and temperature of the Outfall 001 discharge prior to entry into the receiving water body. Monitoring results shall be reported on the monthly Discharge Monitoring Report. This permit may be modified to include formal temperature limitations should the results of the monitoring show that there is reasonable potential to exceed a thermal water quality standard. Modification of this permit shall follow public notice and opportunity for comment.

There shall be no abnormal temperature changes that may adversely affect aquatic life unless caused by natural conditions. The normal daily and seasonal temperature fluctuations which existed before the addition of heat due to other than natural causes shall be maintained.

The monthly maximum value shall be reported on the DMR form.

<u>SPECIAL CONDITION 4</u>. The discharge from Outfall 008 is not allowed any mixing with the receiving stream in order to meet applicable water quality thermal limitations. Therefore, discharge of wastewater from this facility must meet the following thermal limitations prior to discharge into the receiving stream.

A. The discharge must not exceed the maximum limits in the following table during more than one percent of the hours in the 12 month period ending with any month. Moreover, at no time shall the water temperature of the discharge exceed the maximum limits in the following table by more the 1.7° C (3° F).

	Jan.	Feb.	Mar.	<u>April</u>	May	<u>June</u>	<u>July</u>	Aug.	Sept.	Oct.	Nov.	Dec.
°F	60	60	60	90	90	90	90	90	90	90	90	60
°C	16	16	16	32	32	32	32	32	32	32	32	16

- B. In addition, the discharge shall not cause abnormal temperature changes that may adversely affect aquatic life unless caused by natural conditions.
- C. The discharge shall not cause the maximum temperature rise above natural temperatures to exceed 2.8° C (5° F).
- D. The monthly maximum value shall be reported on the DMR form.

<u>SPECIAL CONDITION 5</u>. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

<u>SPECIAL CONDITION 6</u>. If an applicable effluent standard or limitation is promulgated under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the NPDES Permit, the Agency shall revise or modify the permit in accordance with the more stringent standard or prohibition and shall so notify the permittee.

<u>SPECIAL CONDITION 7</u>. The use or operation of this facility shall be by or under the supervision of a Certified Class K operator.

<u>SPECIAL CONDITION 8</u>. In addition to the other requirements of this permit, no effluent shall contain settleable solids, floating debris, visible oil, grease, scum or sludge solids. Color, odor and turbidity must be reduced to below obvious levels.

SPECIAL CONDITION 9. For the purpose of this permit, Outfall 001 is limited to cold lime softener blowdown, cooling tower blowdown, boiler blowdown, Pressure filter backwash, Ammonia Plant Compressor Blowdown and Pump Seal Flush, Sodium Zeolite Softener Regeneration Rinse, Well Rehabilitation Waters, and Storm Wate Runoff, free from other wastewater discharges, and free from chemical additives other than those previously approved by this Agency. In the event the permittee shall require the use of water treatment additives other than those previously approved by this Agency or those that were requested as part of this renewal, or if the permittee increases the feed rate or quantity of the additives used beyond what has been approved by this Agency, the permittee shall request a modification of this permit in accordance with the Standard Conditions – Attachment H.

### **Special Conditions**

<u>SPECIAL CONDITION 10</u>. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) Forms using one such form for each outfall each month.

In the event that an outfall does not discharge during a monthly reporting period, the DMR Form shall be submitted with no discharge indicated.

The Permittee may choose to submit electronic DMRs (NetDMRs) instead of mailing paper DMRs to the IEPA. More information, including registration information for the NetDMR program, can be obtained on the IEPA website, <a href="http://www.epa.state.il.us/water/net-dmr/index.html">http://www.epa.state.il.us/water/net-dmr/index.html</a>.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 15th day of the following month, unless otherwise specified by the permitting authority.

Permittees not using NetDMRs shall mail Discharge Monitoring Reports with an original signature to the IEPA at the following address:

Illinois Environmental Protection Agency Division of Water Pollution Control 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

Attention: Compliance Assurance Section, Mail Code # 19

<u>SPECIAL CONDITION 11</u>. All samples for Total Residual Chlorine shall be analyzed by an applicable method contained in 40 CFR 136, equivalent in accuracy to low-level amperometric titration. Any analytical variability of the method used shall be considered when determining the accuracy and precision of the results obtained. For the purpose of this permit Total Residual Chlorine means those substances which include combined and uncombined forms of both chlorine and bromine and which are expressed, by convention, as an equivalent concentration of molecular chlorine.

The water quality standard for TRC (0.011 mg/l 30-day average and 0.019 mg/l daily max) is below the method detection level (0.05 mg/l) as described in 40 CFR 136. Therefore, for the purpose of this permit, the method detection level will be utilized to determine compliance with the permit limit for TRC. A measurement of <0.05 mg/l reported on the DMR shall not be considered a violation of the water quality based effluent limit. This reporting threshold is being established to determine compliance and does not authorize the discharge of TRC in excess of the water quality based effluent limit.

<u>SPECIAL CONDITION 12</u>. The permittee shall submit an antidegradation assessment in accordance with Title 35 III. Adm. Code 302.105 for any modification that will result in an increase in pollutant loading including but not limited to the addition of a new waste stream or an increase in flow beyond the permitted volumes noted on page 2 of this permit.

<u>SPECIAL CONDITION 13.</u> The effluent, alone or in combination with other sources, shall not cause a violation of any applicable water quality standard outlined in 35 III. Adm. Code 302.

<u>SPECIAL CONDITION 14.</u> The sum of the daily maximum (lbs/day) of ammonia (as N) from Outfall 001 and the daily maximum (lbs/day) of ammonia (as N) from Outfall 008 shall not exceed the Outfall 001 daily maximum limit of 645 lbs/day of ammonia (as N).

<u>SPECIAL CONDITION 15.</u> The sum of the daily maximum (lbs/day) of organic nitrogen (as N) from Outfall 001 and the daily maximum (lbs/day) of organic nitrogen (as N) from Outfall 008 shall not exceed the Outfall 001 daily maximum limit of 1,742 lbs/day of organic nitrogen (as N).

<u>SPECIAL CONDITION 16.</u> The sum of the daily maximum (lbs/day) of nitrates (as N) from Outfall 001 and the daily maximum (lbs/day) of nitrates (as N) from Outfall 008 shall not exceed the Outfall 001 daily maximum limit of 587 lbs/day of nitrates (as N).

SPECIAL CONDITION 17. The Agency has determined that the effluent limitations in this permit constitute BAT/BCT for storm water which is treated in the existing treatment facilities for purposes of this permit reissuance, and no pollution prevention plan will be required for such storm water. In addition to the chemical specific monitoring required elsewhere in this permit, the permittee shall conduct an annual inspection of the facility site to identify areas contributing to a storm water discharge associated with industrial activity, and determine whether any facility modifications have occurred which result in previously-treated storm water discharges no longer receiving treatment. If any such discharges are identified the permittee shall request a modification of this permit within 30 days after the inspection. Records of the annual inspection shall be retained by the permittee for the term of this permit and be made available to the Agency on request.

### **Special Conditions**

<u>SPECIAL CONDITION 18.</u> The Agency has reviewed the mixing study performed by Huff & Huff, Inc dated May 2015. The results of the study were that the dimensions of the ZID were 15' wide by 15' long and had a dilution factor of 36:1 and the dimensions of the mixing zone were 50' wide by 100' long and had a dilution factor of 217:1. Based on this analysis, no water quality based effluent limits are necessary at Outfall 001 for ammonia or zinc. In order to prevent backsliding, the existing NPDES permit limits for ammonia and zinc have been retained in the permit.